

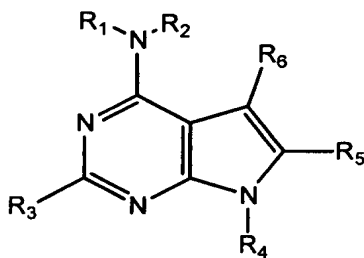
Applicants: Arlindo L. Castelhana et al.
Serial No.: 10/816,329
Filed : March 31, 2004
Page 2

Amendments to the Claims

Please amend claims 5 under the provisions of 37 C.F.R. §1.121, as set forth in the Federal Register on June 30, 2003, as follows:

Claims 1-4. (Canceled)

5. (Currently Amended) A method for treating a disease or condition associated with increased levels of adenosine in a subject, which comprises administering to the subject a therapeutically effective amount of an N-6 substituted 7-deazapurine so as to thereby treat the disease or condition associated with increased levels of adenosine in the subject, wherein said N-6 substituted 7-deazapurine has the formula I:



(I)

wherein,

R₁ and R₂ together form a substituted or unsubstituted heterocyclic ring;

R₃ is a substituted or unsubstituted aryl moiety;

R₄ is a hydrogen atom, an unsubstituted alkyl, or a substituted or unsubstituted aryl moiety; and

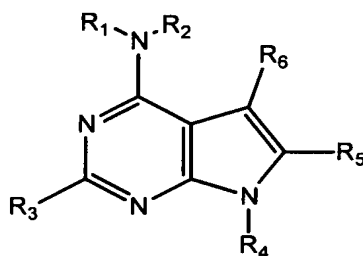
R₅ and R₆ are each independently a halogen atom, a hydrogen atom or a substituted or unsubstituted alkyl, aryl, or alkylaryl moiety,

Applicants: Arlindo L. Castelhana et al.
Serial No.: 10/816,329
Filed : March 31, 2004
Page 3

wherein the disease or condition associated with increased levels of adenosine in the subject is mast cell degranulation, ~~neutrophil chemotaxis, Parkinson's disease, sedation,~~ asthma, ~~cerebral ischemia,~~ antidiuresis, allergic rhinitis, bronchitis, bronchoconstriction, ~~chronic obstructive pulmonary disease,~~ or glaucoma.

Claims 6-10. (Canceled)

11. (Previously Presented) An N-6 substituted 7-deazapurine having the formula I:



(I)

wherein,

R₁ and R₂ together form a substituted or unsubstituted heterocyclic ring;

R₃ is a substituted or unsubstituted aryl moiety;

R₄ is a hydrogen atom, an unsubstituted alkyl, or a substituted or unsubstituted aryl moiety; and

R₅ and R₆ are each independently a halogen atom, a hydrogen atom or a substituted or unsubstituted alkyl, aryl, or alkylaryl moiety, or a pharmaceutically acceptable salt thereof.

Applicants: Arlindo L. Castelhana et al.
Serial No.: 10/816,329
Filed : March 31, 2004
Page 4

12. (Previously Presented) A deazapurine of claim 11, wherein:

R₁ and R₂ together form a substituted or unsubstituted heterocyclic ring;

R₃ is unsubstituted or substituted aryl;

R₄ is hydrogen; and

R₅ and R₆ are each independently hydrogen or alkyl, or a pharmaceutically acceptable salt thereof.

Claims 13-21. (Canceled)

22. (Previously Presented) The deazapurine of claim 12, wherein said heterocyclic ring is substituted with an amine.

23. (Previously Presented) The deazapurine of claim 12, wherein said heterocyclic ring is substituted with acetamido.

Claims 24-186. (Canceled)

187. (Previously Presented) The deazapurine of claim 11, wherein any substituent, if present, is halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxycarbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, alkyl amino, dialkylamino, arylamino, diarylamino, alkylarylamino, acylamino, alkylcarbonylamino, arylcarbonylamino, carbamoyl, ureido, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, cyano, azido, heterocyclyl, alkylaryl, or an aromatic or heteroaromatic moiety;

Applicants: Arlindo L. Castelhana et al.
Serial No.: 10/816,329
Filed : March 31, 2004
Page 5

which substituent may be further substituted by any of the above.

188. (Previously Presented) The deazapurine of claim 187, wherein any substituent, if present, is halogen, hydroxyl, alkylcarbonyloxy, alkoxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, amino, alkylamino, dialkylamino, acylamino, alkylcarbonylamino, arylcarbonylamino, carbamoyl, ureido, amidino, imino, nitro, heterocyclyl, alkylaryl, or an aromatic or heteroaromatic moiety;

which substituent may be further substituted by any of the above.

189. (Previously Presented) The deazapurine of claim 188, wherein the substituent is halogen, hydroxyl, alkylcarbonyloxy, alkoxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, amino, alkylamino, dialkylamino, acylamino, alkylcarbonylamino, arylcarbonylamino, carbamoyl, ureido, amidino, imino, nitro, heterocyclyl or a heteroaromatic moiety;

which substituent may be further substituted by any of the above.